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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,062	04/07/2004	Jin Yeol Kim	20040-00013	9643

7590 11/01/2005

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EXAMINER

ZACHARIA, RAMSEY E

ART UNIT PAPER NUMBER

1773

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/821,062

Applicant(s)

KIM ET AL.

Examiner

Ramsey Zacharia

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 6-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/26/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I in the reply filed on 22 October 2005 is acknowledged. The traversal is on the ground(s) that the inventive film is different from the product made by the process suggested by the Examiner because the composition and method employed by the Applicants are different. This is not found persuasive because it appears that the product as claimed requires only a transparent polymer film and a conductive layer formed by depositing a polymer of formula (1). Regardless of how the polymer of formula (1) is to be deposited on the transparent substrate (e.g. spin coating or vapor phase polymerization), the resulting product would be a conductive film of polymer (1) deposited on a substrate.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 6-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in the reply filed on 22 October 2005. The Applicants' request for rejoinder in the event that allowable subject matter is found in the product claim.

### ***Specification***

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al. (US 2003/0045663 A1).

Kim et al. teach a substrate coated with a conductive polymer (paragraph 0010). The substrate may be a plastic such as polyester, polycarbonate, or polyamide (paragraph 0011). The conductive polymer has a structure that meets the limitations of formula (1) of instant claim 1 (paragraph 0018).

Substrates of polyester, polycarbonate, and polyamide are taken to inherently be transparent polymer substrates because polyester, polycarbonate, and polyamide are cited in the instant specification as suitable materials for forming the transparent polymer film (see paragraph 24 bridging pages 9 and 10).

6. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Shinohara (US 2005/0042442 A1).

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Shinohara teaches a transparent polymer film having a conductive polymer coating applied thereon (paragraph 0001). The conductive polymer reads on formula (1) of instant claim 1 in which X is S (paragraph 0012).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasunori et al. (JP 05-307,104) in view of Fujimaki et al. (US 6,191,837 B1).

Note: because an English language translation of JP 05-307,104 was unavailable at the time of this action, the JPO and Derwent abstracts as well as the JPO machine assisted translation were relied upon.

Yasunori et al. teach a filter comprising a transparent plastic film, a hardened film, and an antireflection layer over the hardened film (abstract). The filter comprises part of a polarizing plate used in a liquid crystal display to provide the display with an acid-resisting function (paragraph 0010). In the embodiment of the example, the acid-resisting function is imparted by the antireflection layer which is formed by successively laminating layers including a titanium oxide layer (i.e. a high refractive layer) and a silicon oxide layer (i.e. a low refractive layer) (paragraph 0012).

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Yasunori et al. do not teach the presence of a conductive polymer layer comprising a polymer for formula (1) as recited in instant claim 1.

Fujimaki et al. teach the application of an electroconductive film to a liquid crystal display to prevent static electricity from exerting undesirable effects on the display (column 5, line 57-column 6, line 13). The electroconductive film may comprise a polythiophene having a structure that reads on formula (1) of instant claim 1 wherein X is S and R<sub>1</sub> and R<sub>2</sub> together form a cyclic structure containing hydrocarbon together with at least one O atom (column 6, lines 40-55). In one embodiment, the electroconductive film is formed on the polarizing plate of the liquid crystal display (Figure 2 and column 12, lines 42-46).

One skilled in the art would be motivated to provide the polarizing plate taught by Yasunori et al. with an electroconductive film as taught by Fujimaki et al. to provide the resulting article with protection from the effects of static electricity.

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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10. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 16 of U.S. Patent No. 6,664,355 B2 in view of Hani et al. (US 5,334,424).

Claim 16 of U.S. Patent No. 6,664,355 B2 teaches an electronic display or transparent electrode comprising a conductive polymer that reads on the polymer of formula (1). However, claim 16 of U.S. Patent No. 6,664,355 B2 does not teach the use of a transparent substrate supporting the transparent electrode.

Hani et al. teach a liquid crystal display (i.e. an electronic display) having a substrate to which a transparent electrode is laminated (column 5, lines 61-64). The substrate is formed of a polymer film having excellent transparency, water resistance, resistance to chemicals, processability, strength relative to weight, flexibility, and low retardation (column 2, lines 6-12).

One skilled in the art would be motivated to use the substrate of Hani et al. in the transparent electrode and/or electronic display of claim 16 of U.S. Patent No. 6,664,355 B2 to yield a product with improved water resistance, resistance to chemicals, processability, strength relative to weight, flexibility, and one having low retardation.

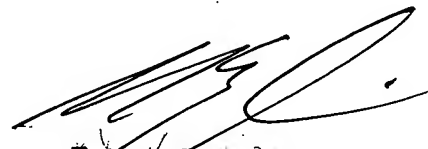
### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ramsey Zacharia**  
**Primary Examiner**  
**Tech Center 1700**